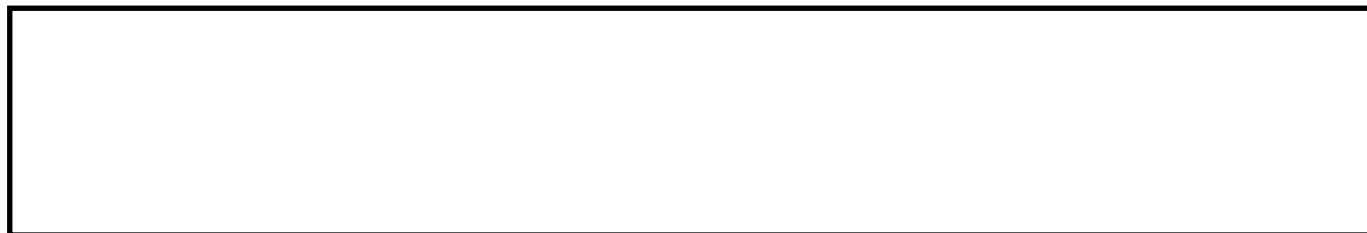


SENARATNE, S., VICTORIA, M.F. and SAMARAWEEERA, A. 2019. Building a supportive culture for sustained organizational learning in public sectors including project learning. In Albastaki, Y.A., Al-Alawi, A.I. and Al-Bassam, S.A. (eds.) *Handbook of research on implementing knowledge management strategy in the public sector*. Hershey: IGI Global [online], pages 91-111. Available from: <https://doi.org/10.4018/978-1-5225-9639-4.ch005>.

Building a supportive culture for sustained organizational learning in public sectors including project learning.

SENARATNE, S., VICTORIA, M.F., SAMARAWEEERA, A.

2019



Handbook of Research on Implementing Knowledge Management Strategy in the Public Sector

Yousif Abdullatif Albastaki
Ahlia University, Bahrain

Adel Ismail Al-Alawi
University of Bahrain, Bahrain

Sara Abdulrahman Al-Bassam
Arabian Gulf University, Bahrain

A volume in the Advances in Knowledge
Acquisition, Transfer, and Management (AKATM)
Book Series



Published in the United States of America by

IGI Global
Information Science Reference (an imprint of IGI Global)
701 E. Chocolate Avenue
Hershey PA, USA 17033
Tel: 717-533-8845
Fax: 717-533-8661
E-mail: cust@igi-global.com
Web site: <http://www.igi-global.com>

Copyright © 2019 by IGI Global. All rights reserved. No part of this publication may be reproduced, stored or distributed in any form or by any means, electronic or mechanical, including photocopying, without written permission from the publisher. Product or company names used in this set are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark.

Library of Congress Cataloging-in-Publication Data

Names: Al-Alawi, Adel Ismail, 1958- editor. | Al-Bassam, Sara Abdulrahman, 1978- editor. | Albastaki, Yousif, 1962- editor.
Title: Handbook of research on implementing knowledge management strategy in the public sSector / [edited by] Adel Al-Alawi, Sara Al-Bassam, and Yousif Albastaki.
Description: Hershey, PA : CyberTech Publishing 2020. | Includes bibliographical references. | Summary: ""This book explores different concepts, factors, strategies, and practices that lead to the most effective and efficient way of utilizing, managing, and sustaining knowledge management in public sector organizations to improve organizational learning and performance excellence"--Provided by publisher"-- Provided by publisher.
Identifiers: LCCN 2019005669 | ISBN 9781522596394 (hardcover) | ISBN 9781522596417 (ebook)
Subjects: LCSH: Public administration--Information technology. | Knowledge management | Internet in public administration. | Organizational effectiveness.
Classification: LCC JF1525.A8 I456 2020 | DDC 352.3/8--dc23
LC record available at <https://lccn.loc.gov/2019005669>

This book is published in the IGI Global book series Advances in Knowledge Acquisition, Transfer, and Management (AKATM) (ISSN: 2326-7607; eISSN: 2326-7615)

British Cataloguing in Publication Data

A Cataloguing in Publication record for this book is available from the British Library.

The views expressed in this book are those of the authors, but not necessarily of the publisher.

For electronic access to this publication, please contact: eresources@igi-global.com.

Chapter 5

Building a Supportive Culture for Sustained Organizational Learning in Public Sectors Including Project Learning

Sepani Senaratne

Western Sydney University, Australia

Michele Florencia Victoria

 <https://orcid.org/0000-0002-3706-7474>

Robert Gordon University, UK

Aparna Samaraweera

University of South Australia, Australia

ABSTRACT

The purpose of this chapter is to provide an approach to build a supportive organizational culture for sustained organizational learning in public sectors and means of extending such learning culture to project level. Changing culture is not an easy task. It involves an in-depth understanding of culture and its relationship with organizational learning. First, this chapter provides a brief introduction to organizational learning, organizational culture and their relationship. Then, characteristics and attributes of a learning culture are identified. Such discussion is then extended to the project culture and the learning culture at project level. Next, using case study research findings of a public sector construction organisation operating in Sri Lanka, an approach is presented in this chapter on how to identify the present culture of the organisation and change it to a learning culture. Finally, possibility of extending such learning culture to project level is discussed at Sri Lankan context.

DOI: 10.4018/978-1-5225-9639-4.ch005

INTRODUCTION

The organisational learning research has been developed in parallel to knowledge management research. 'Knowledge management' and 'organisational learning' often overlap and there are many research studies that have aimed to explore the similarities between these two concepts (for example, see Loermans, 2002; Wang and Ahmad, 2003). Learning occurs through different knowledge management processes such as knowledge creation and knowledge transfer, either in individual, group or organisation level. Hence, it is important to focus on organisational learning when implementing knowledge management strategies in any organisation. While organisational challenges call for learning and creativity, there is no consensus around what organisational learning is or how to best facilitate it (Scott, 2011). Even though,

All organisations learn, whether they consciously choose to or not, it is a fundamental requirement for their sustained existence. Some firms deliberately advance organisational learning, developing capabilities that are consistent with their objectives; others make no focused effort and, therefore, acquire habits that are counter-productive. (Kim, 1993, p.37)

Argyris (1995) says learning occurs whenever errors are detected and corrected and there are at least two ways to correct errors. One is to change the behaviour known as single-loop learning and the second way is to change the underlying assumptions known as double-loop learning (Argyris, 2002). Double-loop learning is the one which requires change in cultural model of the organisation. Further, specific studies into public sector organisations reveal that organisational learning has certain limitations in public sector due to state interference, formalised rules and procedures, negative attitude of employees towards organisational learning, lack of awareness, less challenges and minimum competition. To overcome these limitations, organisational culture plays a key role.

Organisational learning could be affected by organisational culture in several ways as stated by De Long and Fahey (2000). At first, culture shapes employees' assumptions about whether knowledge is important or not and what knowledge is worth managing. Next, culture allows individual knowledge to become organisational knowledge. Then, culture shapes the processes by which new knowledge is created, legitimated and disseminated. Finally, culture creates the context for social interaction that ultimately determines how effective an organisation can be at creating, sharing and applying knowledge. Consequently, different organisational cultures will have different influences on organisational learning (Lee and Chen, 2005). Further, it was found that proper leadership together with learning culture would foster organisational learning (Argyris, 1999; Chang & Lee, 2007; Kondalkar, 2009) and enable to overcome above identified limitations in the public sector organisations.

This calls for a step change in the present culture of public sector organisations. However, changing culture is not an easy task. It requires an in-depth understanding of culture and its relationship with organisational learning as some studies have found that culture to be either fostering or inhibiting learning (Graham and Nafukho, 2007; Huemer and Ostergren, 2000; Valle et al., 2011). Hence, cultural attributes that inhibit and facilitate learning should be identified in order to change the present culture of an organisation to a learning culture that promotes knowledge management strategies. Even though, there are some past studies that explored organisational learning and its relationship with organisation culture, there seems to be a gap in exploring how the culture could be shaped in order to promote sustained organisational learning, in particular, in public sector organisations.

Many industries such as construction, film, game, consultancy, and information technology are operating mostly as project oriented organisations (Bossink, 2018). The project-oriented organisations use projects as temporary, task-focused organisations to define and develop new products, services, and business models (Gemünden *et al.*, 2018). Following a critical systematic literature review, Wiewiora *et al.* (2018) highlight that organisational learning is a multilevel phenomenon flowing between the levels of individual, project and organisation. However, according to these authors, still there is a limited understanding on the link between organisational level and project level learning. Such an understanding would be essential in managing feedback learning (from organisation down to project and individual) to support training, professional development and performance management of individuals.

Thus, this chapter aims at filling this knowledge gap by providing an approach to identify present culture of a public organisation and change it to a learning culture and then extending such learning culture to project level.

To achieve the above aim following objectives were formulated:

- Identifying organisational learning process
- Explore what composes a learning culture with facilitating attributes and inhibiting attributes
- Identifying cultural facilitators and inhibitors of organisational learning in public sector organisations
- Suggesting an approach for building a supportive culture for sustained organisational learning in public sectors
- Identifying learning culture at project level in public sector
- Identifying cultural facilitators and inhibitors of learning culture at project level in public sector
- Suggestions to extend the organisational learning culture to project level in public sector

BACKGROUND

Concept of Organisational Learning

Organisations are operating in a more turbulent, fast changing and fluxing environment than ever before (Styhre, Josephson & Knauseder, 2004). Organisational learning has become an effective response to phenomena that are generally difficult to manage like globalisation, environmental change, discontinuity, uncertainty and complexity (Almahamid, 2010; Teare & Pantin, 2002). While, organisational learning is a developing concept in public sectors, organisational learning may happen consciously or unconsciously in all organisations as pronounced by Kim (1993).

Organisational learning is considered as the process through which a knowledge base of permanent or temporary organisations is enhanced (Knauseder *et al.*, 2007). The result of this process will be reflected in theories in use, shared mental models, information databases, formalised procedures and routines and formal cultural models that guide behaviour of the organisation (Salter and Narver, 1995). Argyris and Schon (1978) noted that organisational learning occurs when the individual members of the organisation detect the discrepancy between actual and expected results, and try to correct the errors or challenge the underlying assumptions. Hence, learning should be initially encouraged at the individual levels (i.e. employees) of the organization and advanced to team and organisational levels. Hence, organisational learning is more than the sum of the learning of its individual members which encompasses collective

learning including knowledge acquisition, sharing and utilisation of both individually held and commonly shared knowledge (Pham and Swierczek, 2006; Nevis, Dibella, and Gould, 1995). Organisational learning is hence closely related to knowledge management activities. In fact, Huber (1991) puts forward four stages of an organisational learning process as briefed below.

1. **Knowledge Acquisition:** The process by which knowledge is obtained;
2. **Information Distribution:** The process by which information from different sources is shared;
3. **Information Interpretation:** The process by which distributed information is given one or more commonly understood interpretations;
4. **Organisational Memory:** The means by which knowledge is stored for future use.

Figure 1 depicts these four processes and different means that could be used to facilitate each step.

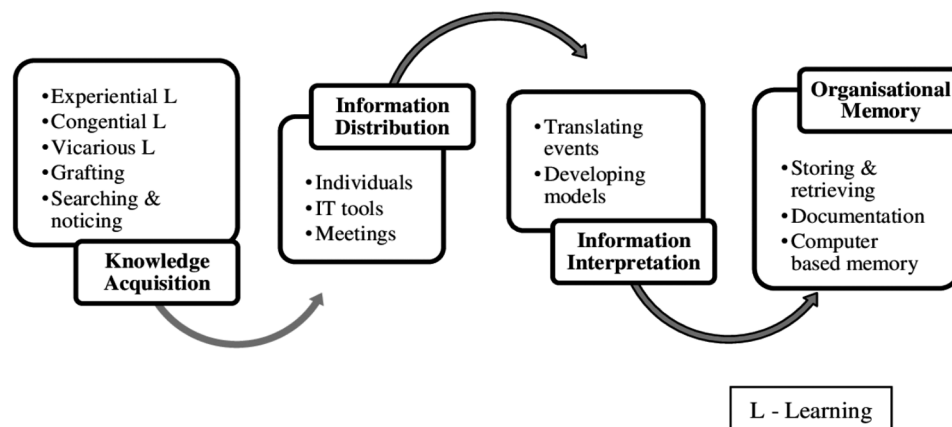
Chang and Lee (2007) and Schein (2010) suppose that while encouraging employees to learn and follow above learning processes, it is necessary for the existence of an organisational culture to support organisational learning, so that it is viable to acquire, improve, transfer and store the required knowledge easily. In fact, the process of learning highly depends on the quality of the culture (Argyris, 1999) and it must ultimately be made part of the culture (Kondalkar, 2009). Precisely, a supporting culture is required to facilitate organizational learning despite other requirements such as organisation structure (Hong, 1999), committed leadership (Ellinger, Watkins & Bostrom, 2000; Pham & Swierczek, 2006) and technology (Almahamid, 2010). Hence, it is inevitable to draw the attention towards the aspects of organisational culture.

Concept of Organisational Culture

Organisational culture is defined in many ways by several scholars as given below:

- A cognitive framework consisting of attitudes, values, behavioural norms and expectations shared by organisational members or a set of basic assumptions shared by members of an organisation (Greenberg & Baron, 2008).

Figure 1. Process of organisational learning



- A pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration which has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems (Schein, 2010).
- The collective programming of the mind which distinguishes the members of one group or category of people from another. It is a collective phenomenon, because it is at least partly shared with people who live or lived within the same social environment which is where it was learned (G. Hofstede, Hofstede and Minkov, 2010).

In sum, Hofstede et al. (2010) and Schein (1990) stress that culture is learned, not inherited because it is derived from one's social environment and not from one's genes. Figure 2 depicts a generic framework of organisational culture.

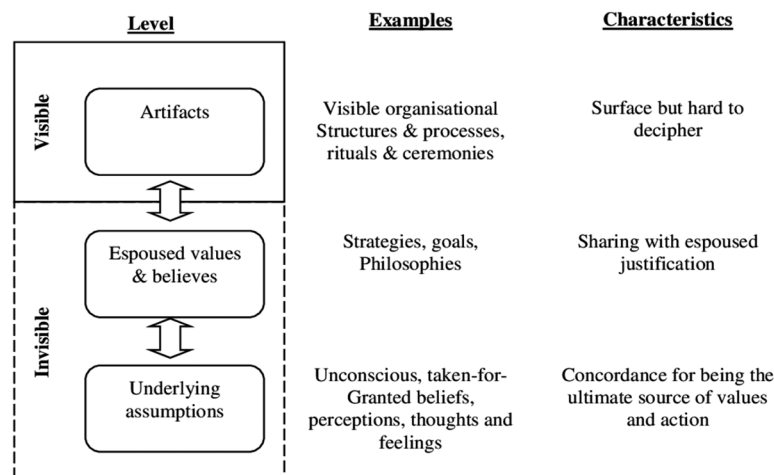
Figure 2 illustrates the basic three levels of culture identified by Schein (2010). In this, hidden values, beliefs and assumptions are shown in two levels which operate beneath the surface of organisational behaviour while the outer level is referred as artifacts through which culture is visible. Some studies have found that these values, beliefs and assumptions influence organisational learning process, either fostering or inhibiting it (Skerlavaj, Indihar, Skrinjar, & Dimovski, 2007; Valle, Valencia, Jimenez, & Caballero, 2011). Therefore, the analysis of a present culture of an organisation to identify to what extent it has characteristics of a learning culture is vital to promote organisational learning.

Effect of Organisational Culture on Project Culture

Project culture is defined as shared values, basic assumptions and beliefs held by the project participants, which determine the way they process the project and the relationship with each other in the project environment (Zuo and Zillante, 2005). Such project culture seems to be affected by different cultures at different levels including national culture, industry culture, organisational culture and professional culture. Kumaraswamy et al. (2002) have attempted to define construction project culture by looking

Figure 2. Organisational culture framework

Adopted from Cheung et al. (2010, p.34)



at the impacts from different levels of culture such as ‘organisational’, ‘professional’, ‘operational’ and ‘individualistic’ levels of culture. They further explain that organisational culture is influenced by national and industry cultural factors. Wiewiora *et al.* (2018) indicate the necessity of learning the dynamisms of learning cultures between individual, project and organisation in any industry. The factors positively influencing the learnings between organisation and project include: culture of flexibility, experimentation and risk-taking; transformational leaders, who limit power of differences; structure (project-based context); politics (systematic power), and organisational initiatives (project based context). The factors negatively influencing the learning between organisation and project include: bureaucratic cultures and short term orientation, and self-protected leaders, who retain control and power.

Characteristics of Learning Culture

Watkins and Marsick (1993; 1996) proposed certain characteristics of a learning culture as explained below.

1. **Promote Inquiry and Dialogue:** Reasoning skills of employees to express their views and the capacity to listen and inquire into the views of others; whether culture support questioning, feedback, and experimentation.
2. **Empower People Toward a Collective Vision:** People involved in setting and implementing a joint vision; responsibility is given to decision making so that people are motivated to learn toward what they are held accountable to do.
3. **Connect the Organisation to its Environment:** People are helped to see the effect of their work on the entire activity; people scan the environment and use information to adjust work practices; the organisation is linked to its communities.
4. **Create Continuous Learning Opportunities:** Learning is designed into work so that people can learn on the job; opportunities are provided for ongoing education and growth.
5. **Encourage Collaboration and Team Learning:** Work is designed to use groups to access different modes of thinking; groups are expected to learn together and work together; collaboration is valued by the culture and rewarded.
6. **Create Systems to Capture and Share Learning:** Systems to share learning are created and integrated with work; access is provided; systems are maintained.
7. **Provide Strategic Leadership for Learning:** Leaders support learning; leadership uses learning strategically for business results.

Accordingly, all or many of the above discussed characteristics must be in-built into organisations’ culture to promote effective organisational learning in organization and identify it as a learning culture. Using above characteristics, Marsick and Watson (2003) proposed an instrument called ‘dimensions of the learning organization questionnaire’ (DLOQ) to identify to what extent the present culture of an organisation possesses learning characteristics which has been tested over 800 organisations. This chapter extends from their study to propose how such an identified culture could be changed or directed towards a learning culture by the management through enabling cultural facilitators and disabling cultural inhibitors of the identified culture.

Cultural Facilitators and Inhibitors of Organisational Learning

Table 1 represents the findings of various studies on cultural attributes that facilitate and inhibit learning. Through the above literature findings, it can be derived that a more flexible, externally focused and employee concerned attributes of culture are likely to facilitate OL while stability and control, internally focused and goal-oriented attributes of culture are to be barriers for learning.

METHODOLOGY

A case study approach is adopted due to its appropriateness for studying organisational learning and cultures. The case (organisations) selected was a construction contracting organisation operating in Sri Lankan construction industry. The case was selected by imposing grading criteria as smaller organisations are less likely to follow learning practices as they are in a need to undertake projects in order to survive and not for competing with others. Also larger organisations will have structured work procedures and proper documentation which will aid the researcher to explore organisational learning practices and cultural aspects residing in the organisation. Further, the history of the organisation was also considered in the criteria for selection since culture should be well established in the organisation and the respondents should be well aware of the culture of the organisation in order to enhance reliability and validity of data being collected.

Data collection of this study was done in three stages. First, questionnaire survey was conducted with the sample size of 20 respondents to measure the level of organisational learning culture of the selected organisations through Dimensions of the Learning Organisation Questionnaire (DLOQ) instrument developed by Marsick and Watkins (2003). This helped to identify the present culture of the

Table 1. Cultural attributes that facilitate and inhibit learning

Studies	Cultural Attributes	
	Facilitators of Learning	Inhibitors of Learning
Schein (1993 & 1996)	Dialogue and communication, people concern	some sort of shared assumptions or myths of rugged individualism
Lopez <i>et al.</i> (2004)	A long-term vision and advance management of the change, communication and dialogue, trust and respect of all individuals, teamwork, empowerment, ambiguity tolerance, risk assumption and respect, diversity encouragement, competitiveness	Hierarchy
Park <i>et al.</i> (2004)	Sharing information freely, working closely with others, team-oriented work, fairness, enthusiasm	Attention to detail, stability, compliance, being calm
Lai and Lee (2007)	Flexibility and external focus, innovation	Tasks-goal-accomplished culture and smooth-running culture
Al-Alawi <i>et al.</i> (2007); Al-Adaileh and Al-Atawi (2010)	Openness to change, innovation, trust, teamwork, morale, information flow, employees' involvement, supervision, customer service and reward orientation	Some form of supervision structures
Valle <i>et al.</i> (2011)	Employees desire to improve and learn, openness, autonomy or self-direction, creativity, interaction with others and long-term orientation	Stability, control, strict time targets

selected public sector organisation. Then, interviews were conducted with two managerial personnel of the organisation to identify how the present culture could be changed towards a learning culture by enabling cultural facilitators and disabling the cultural inhibitors. The third stage comprised of semi-structured interviews with three managerial personnel representing the construction group of the same organisation working for a selected same project and another three managerial personnel representing the consultancy group of the same organisation working for a selected same project. This is to identify the present learning culture at project level, facilitators and inhibitors of learning culture at project level and to generate suggestions to extend the organisational learning culture to project level in public sector. In addition to above data collection methods, observation and document surveys were also used where appropriate. “Mean value” was used to analyse questionnaire data and content analysis was used to analyse data collected from interview.

Case Study

The case is a large public sector construction contracting organisation operating in Sri Lanka which is a state sponsored corporation and functions under the Ministry of Construction & Engineering Services of Sri Lanka.. The organisation was established in 1962 and holds Class 1 grading for building and civil engineering construction. It has been consistently ranked as one of the top Engineering and Construction Organizations in Sri Lanka. Over the years the organisation has developed many innovative construction techniques that became industry standards. Organisation also adheres to ISO quality policy. It is the only local engineering organisation in Sri Lanka, which offers a widest variety of architectural and engineering services under one roof with unmatched experience and capability. The sub groups in the organisation include: Building and Civil Engineering Construction Group, Building and Civil Engineering Consultancy Group, Mechanical and Electrical Engineering Group, Construction Components Group and Information Management Group. Each group is geared to undertake projects falling within their spheres or to work together with any other or all other groups to provide a complete package. Organisation maintains a strong culture which is inherited from the day of establishment.

Following are the research findings obtained from data collected through questionnaire and interviews.

Process of Learning in Selected Public Sector Organisation

As per the case study, all four identified steps of learning process (Huber, 1991) are in practice of the selected organisation. However, these steps are not deliberately advanced and formalised.

Under *knowledge acquisition*, findings revealed that experiential learning being the most common mean of acquiring knowledge which implies direct experience is the first hand mean. Further, founder’s knowledge (congenial learning) has a strong base in case of government organisation and such knowledge is preserved for years. Organisation members seek advice of specialists from other organisations (vicarious learning) whenever involved in specialised works. Further, there are opportunities for newly recruited employees to change organisation’s practices to a limited extent, which implies there is limitation in adopting the knowledge of new members (grafting) as management does not accept everything what employees suggest. In searching and noticing, internet is being the major source of exploring new trends in market.

In *Information distribution*, acquired knowledge is mainly distributed through individuals, IT tools, meetings and seminars. In addition to those, circulars and workshops are also used as means of information distribution. Among all distribution means, meetings and workshops are identified as effective means of information sharing. Other than that, internal seminars are conducted for staff as well as employees are encouraged to participate in external seminars at the cost of the organisation.

Under *Information interpretation*, normally any work is being explained to subordinates in an understandable language. Further, checklists have been developed; various types of formats have been developed; and instructions are given.

In *Organisation memory*, manual filing system is in place and everything is being documented. On the other hand, soft copies are maintained in computer memory to some extent. Backups are mainly maintained by department heads and IT division. However, use of stored information for learning purposes was not evident.

On the whole, knowledge is acquired through several means, though all acquired knowledge is not disseminated. Similarly, all disseminated knowledge is not interpreted. Then, in terms of memory, it is the major lacking part compared to other steps. Organisations fail in recording acquired new knowledge, which prevents the knowledge flow thereby, preventing continual organisational learning. Next, the characteristics of the selected organisational culture was analysed by adopting Watkins and Marsick's (2003) DLOQ instrument, to explore to what extent the present culture of the organisation promotes organisation learning in the selected organisation.

Characteristics of Present Culture of Selected Public Sector Organisation

This was identified based on Watkins and Marsick (1993; 1996) seven dimensions of a learning culture through Dimensions of Learning Organisation Questionnaire instrument (Marsick & Watkins, 2003). Findings of case study are presented in Figure 3:

Key findings presented in Figure 3 are discussed next.

Inquiry and Dialogue

Findings revealed that many people are not motivated and they compete with each other within same division. Thus, some are reluctant in giving feedbacks and sharing opinions. Since it is a government organisation, employees do not want to comment on decisions taken by top management due to political reasons. Further, difference in levels viewed to be highly affecting inquiry and dialogue.

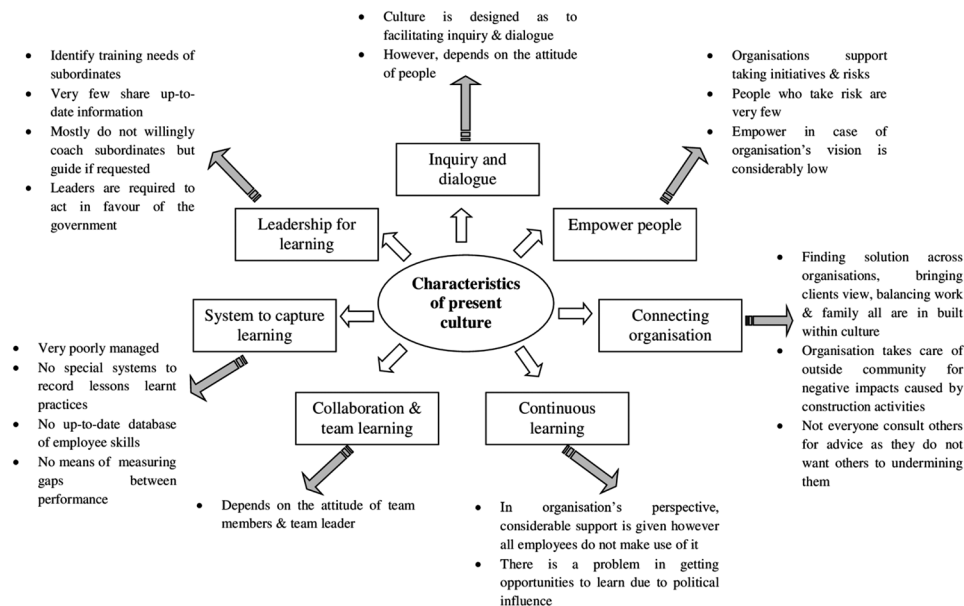
Empower People

Since it is a government organisation political influence is high. Thus, even though superiors have power, some do not want to exercise their power and act in favour of state. Further, less importance is given to employees' views and even employees are reluctant to take initiatives.

Connect the Organisation

Findings show that organisation normally is not concerned about employees' personal matters. However, it can be said that people are given time to balance family and work because of reduced working hours

Figure 3. Characteristics of present culture of selected organisation



(five days 7 hours working time). Thinking from global perspective is much less as most of the projects handled are government projects. Bringing clients view in decision making is very prominent in this case as government is being the major client in most of the projects and being influencing party. Organisation allows solving problem across organisation. However, everyone does not utilise the opportunity.

Continuous Learning

Research findings disclosed that organisation helps employees those who are interested to learn. For example, scholarships are granted to follow higher studies; people can get money and other resources to support their learning; as well as people are given time to support learning. However, everyone does not willingly learn new things. Further, people do not discuss their mistakes openly thinking that they will be penalised. Hence, from organisation's perspective support is given for learning while very few people exploit it.

Collaboration and Team Learning

As per findings, people work in teams share knowledge. However, everyone does not share their knowledge and it depends on attitude of team members. Revising thinking as a result of new information obtained or group discussions rarely happens as there is less likelihood of having group discussions. Members of team are treated as equals, regardless of any differences most of the time while there are exceptional situations also.

Systems to Capture Learning

Findings indicate that system to capture learning is lower than all other dimensions. There is no any lesson learnt practice documented in this organisation. Further, most of newly recruited employees gain experience from the organisation in a shorter period and leave organisation very soon and there is no any mechanism to document their knowledge. Further, there are no special systems to measure gaps or achievements and organisation does not maintain an up-to-date database of employee skills. This has been identified by interviewees as a real short fall in terms of learning. The organisation has failed to win projects through tendering as a contractor due to not inability of maintaining the economies of their bids. One reason for this is the rigid systems in place, which are difficult to change (inflexible workforce, high head office overhead, rigid working times etc). The interviewees highlight the necessity of learning better systems from private construction firms for better competition in the market place as a contractor.

Provide Strategic Leadership for Learning

Empirical evidence revealed that leaders do not give opportunity for all people to learn. Some selected people are benefited due to political influence. Here, most of technical people (QS, architect, engineers, technical officers, etc.) get opportunity to follow courses while non technical persons (clerks, data entry operators, accountants etc.) do not get opportunities to learn. Hence, even though leaders support, there are political issues controlling leaders which are inevitable in a government organisation. Moreover, sharing up-to-date information with employees about competitors, industry trends, and organisational directions is almost does not happen.

According to findings it can be suggested that present culture of selected public sector construction organisation is likely to have restrictions on empower people, lack in systems to capture learning and highly affected by attitude of employees and leaders. Therefore, research findings revealed that there is more scope for improving the present culture towards a learning culture under seven identified dimensions and advance effective learning deliberately in order to face future challenges.

Cultural Facilitators and Inhibitors for Organisational Learning in Selected Public Sector Organisation

The interviews with managers revealed organisation specific cultural attributes that facilitate and inhibit organisational learning in selected public sector organisations (see Table 2).

Accordingly, following aspects were identified from the interview analysis in the selected public sector organisation.

Dominant Characteristics of the Organisation

- Production related strategies: where there is production target people tend to achieve that target through alternative means by exploring new ways. However, to make that happen organisations must have adequate recourses. When it has inadequate recourses strategies for production cannot be developed. Thus, strategy must consider resources base of the firm. Further, to improve production different strategies need to be adopted that will generate new knowledge. Hence, interviewees think this to be facilitating organisation learning.

Table 2. Cultural attributes for organisational learning in public sectors

Facilitators	Inhibitors
Production related strategies	Formalised & structured characteristics
Diversity encouragement	Traditions
Loyalty	Competitive organisational environment
Goal accomplishment	
Innovation	
Mentoring	
Risk taking	
Openness to change	
People concern	
Market penetration	
Team work & Participation	
Reward orientation	
Autonomy	
Strict time targets	
Stability	

- Diversity encouragement: different exposure gives different knowledge from different specialised persons. When diversifying organisations must learn the new field to survive. It enhances motivation and learning opportunities. Thus, it facilitates learning.
- Formalised and structured characteristics: when people used to follow the formalised procedures their thinking ability will be restricted. If it is rigid then it is difficult to accommodate changes or to learn. When continually doing the same thing learning cannot happen. All these support inhibiting nature.
- Loyalty and traditions: when people are loyal they tend to learn and develop the organisation. Loyalty creates mutual trust and leads to learning. Traditional knowledge base from seniors is a valuable resource to the organisation. However, organisations have to think about the modern technology in parallel. If organisation always follows traditions then it will not help a learning organisation. Traditions may inhibit new knowledge flow. Therefore, findings reveal that loyalty facilitates while heavy reliance on tradition inhibit learning.
- Goal accomplishment: to accomplish goals new technologies have to be adopted which leads to learning. If the goal is challenging, then people will look at different options to achieve it. That gives a learning process to organisation. Hence, it facilitates.

Style of Organisation Leader

- Mentors/teacher: employees can learn from leaders when they teach. Employees also learn by observing leaders. Depending on the background of the leader outcome can be positive or negative. If leaders teach subordinates, then the knowledge of employees will be enhanced. However,

learning becomes meaningful if the employees take considerable effort to experiment what they have learnt.

- Competitors: it facilitates because leaders try to match up with their competitors. Thus, leaders will learn and educate subordinates in order to compete with others. However, leaders must be correctly focused and should not step into new field solely to match their competitors. It has to be a gradual process. Leaders must have a vision to work towards it. If the competition is not properly focused, then it may inhibit learning due to too many errors because of unnecessary rush.
- Entrepreneur/Innovators: this requires knowledge to be updated. If leaders are doing the same thing repeatedly then there is no improvement in organisation's behaviour. When implementing innovative ideas learning must take place to make sure that it works. For innovation to take place exploration of new knowledge is essential. Therefore, this facilitates.
- Risk takers: without risk there is no improvement. However, there should be strong financial base to take risks. If leaders are to be conservative, then no new solutions can be derived. Leaders have to take risks to learn things. Thus, risk taking leads to learning. When risk is taken there is tendency to learn more to minimize the risk.

Nature of Organisation's Environment

- Participative and comfortable: participation facilitates learning. When employees participate in discussion knowledge can be shared. Pros and cons can be discussed and effective decision can be made. Further, when people are comfortable they can work happily and can concentrate on learning as well. Thus, findings suggests this to be facilitating as well as inhibiting when people are uncomfortable they try to become comfortable by learning and improving.
- Competitive: when people try to compete with each other at peer level information sharing does not happen. So there will be no knowledge distribution creating lag in learning process. That will have a negative impact on learning. Hence, this inhibits learning.
- Readiness/openness to change: this facilitates learning as this enables to accommodate updated techniques, rules and procedure. Organisation is ready to accommodate change means organisation is ready to acquire new knowledge. A change is accommodated when a loop hole is identified. Thus, to fill that gap organisations have to learn. When there is openness to change there is flow of new knowledge. People have to move for new arenas from traditional myths to compete in developing world.
- Stable: this can be viewed in two ways. First, it is important to learn to sustain the stability. Business stability request learning. Also if organisation is stable then there is possibility to take initiative which leads to learning. Second, if the environment is stable then there is no way of improving. Hence, no opportunity to learn.

Success Criteria of the Organisation

- People concern: as per findings this facilitates learning. Without people there is no business. Based on the relationship with people it is possible to develop knowledge by sharing. When people are recognized they tend to learn. It is beneficial to organisation as well as people tend to be loyal. When people are happy with their organisation they work hard and learn more. However, findings also revealed that this also depends on the attitude of the people.

- Market penetration: to penetrate markets organisations need to explore information about other markets. Therefore, worldwide standards can be explored. This leads to learning.
- Strict time targets: findings suggest when time targets are imposed on people they will learn to finish it within the stipulated time. However, the time target must be practical. Then, it will help people to learn. If the time target is impossible to achieve it leads to forego the quality. Achieving target at the expense of quality is not wise. However, attitude of employees plays a major role.

Management Style Toward Employees

- Teamwork and participation: knowledge sharing happens in teamwork. Thus, everybody can learn from the others. Through team work employees can achieve time and quality targets by sharing knowledge.
- Reward orientation: when incentives and increments are rewarded for extreme performance there is scope for learning. Reward may be monetary or non-monetary. Findings pointed out an issue regarding reward is, if reward is promised prior to committing to a work then that promise should be fulfilled by the organisation. If deserving people are not rewarded as promised then it will have completely a negative impact. This again depends on attitude of the people.
- Freedom/Autonomy of employees: findings revealed when freedom is given there will be generation of new ideas which leads to learning. On the other hand, there is a limitation since organisations have the company policy and if people do not adhere to the company policy and commit mistake, it affects the company. Therefore, leaders must be critics when giving freedom to employee.
- Sharing information freely: sharing information freely leads to acquire more knowledge if there are no limitations in sharing. However, knowledge sharing should be between peer levels because if the information is not understood by people it becomes meaningless and in some cases confidential information about organisation or project cannot be revealed to everyone.

As above case study findings reveal, most of the identified attributes are to be clearly facilitating learning except formalised and structured organisation characteristics, heavy reliance on traditions and less competitive organisation environment. All these facilitating attributes reflects flexibility, external orientation as well as people concern. However, literature identified goal accomplishment (Lai & Lee, 2007), strict time targets (Valle et al. 2011) and stability (Park, Ribree & Schutle 2004; Valle et al. 2011) as inhibiting learning while case study findings suppose that those attributes may also facilitate learning. This is because traditional solutions may not be appropriate to accomplish certain project goals in future. If goal is challenging then there is a need to explore different options to achieve it. That gives a learning opportunity to organisation. Further, findings suggest when time targets are imposed people will learn to accomplish tasks within the stipulated time. Nevertheless, it has also been realised that the set time target must be practical for learning to occur. Then, stable organisations can take risks which also lead to learning. Therefore, certain findings contradict to what has been established in literature and could be regarded as specific to the selected public sector organisation.

Characteristics of Present Learning Culture at Project Level of the Selected Public Sector Organisation

Most of the projects handled by the selected organisation are public sector projects. This is due to the reason of organisation being a semi-government organisation holding the competitive advantage of being reliable for government procurements. This organisation involve in projects either as contractor or consultant. Case study findings reveal that although learning culture at project level is more of a fragmented nature. This is because, clients, contractors and consultants as project participants do not put joint efforts to sustain an integrated learning culture at project level. Each participant has set mechanisms to manage learnings only at their respective sub-cultural level or organisational level only. An analysis of present learning culture at project level of the selected public sector organisation is given below:

Inquiry and Dialogue

It is evident that contractor and consultant constantly compete with each other in project context. This competition leads all project team members including contractors, consultants and clients to give feedback and share opinions without any hesitation and in a very responsible manner. Most opinions are critically challenged for viability in terms of technical aspects, contractual aspects, financial aspects and so on.

Empower People

Since public sector projects are considered, political influence of client is high. When politically powerful clients are involved, they govern the decision making. However, when highly professional or laymen clients are involved, contractor and consultant are empowered to make sound technical decisions, without any political bias of client. Client retains the power of making decisions regarding financial matters.

Connect the Project to its Environment

Findings indicate that projects are open to the effects of the environment. A contractor to a project is more prone to economic, environmental, legal and technical volatility than being a consultant to a project. For example, exchange rate volatility, labour scarcities, adopting to new technologies in the market demanded by clients and other private sector consultant etc. Interviewees indicate that being a contractor is more challenging than being a consultant for a project. Thus, learning opportunities as a contractor is higher than being a consultant.

Continuous Learning

Learning opportunities are available only with on the job working experiences. Projects do not have any extra investments for learning opportunities for the staff of client, contractor or consultant. Staff of client, contractor and consultant individually engage in learning opportunities provided by their respective organisations. Most construction contracts include contractual clauses allowing for value engineering opportunities. However, none of the contractors, consultants or clients seems utilizing it for innovations. According to the interviewees, the reason for such laid-back behaviour is due to the senior management of the organisation of the case being reluctant to take the risk of any innovations or learnings in projects.

Collaboration and Team Learning

Consultant is constantly criticised for lack of integration among team members. This is mainly due to the reason that consultant's project organisational structure being more of a functional matrix with majority of the staff working parallel for several projects. Consultants hold more individualistic characteristics in their conduct. They expect contractor to construct the design provided by them, without further inquiries. This deters team learning. In contrast, contractor is more collective in their conduct and always tend to inquire team consensus for work execution being open to learning.

Systems to Capture Learning

There is no system adopted at project level to capture the project learnings. Many of the members of the contractor's team are on contract basis for the project period, where the knowledge gained as the contractor is lost at the end of a project due to non-maintenance of a proper system to retain such knowledge. Knowledge gained as a consultant is retained for a considerable period of time, as many of the consultancy staff is permanent employees of the organisation, who work for a longer period of time but, such knowledge is also lost due to lack of a proper knowledge storage system.

Provide Strategic Leadership for Learning

Project managers of construction project teams in public sector do not take the leadership role in their conduct. Their role is mostly limited to a coordination of personnel and tasks. Consultants mostly prefer individual role authority. However, contractor seek for autocracy of an unbiased and dedicated leader. Therefore, contractor's team always depends on the contractor's team leader's directions for learning.

Cultural Facilitators and Inhibitors for Project Learning Culture in Selected Public Sector Organisation

The interviewees revealed the cultural attributes that facilitate and inhibit project learning culture of the selected public sector organisation (see Table 3).

SOLUTIONS AND RECOMMENDATIONS

Based on literature and case study findings it was realised that public sector organisations have more scope for building a supportive culture to promote sustained organisational learning practices in their organisation which could be discussed under four areas such as strategy, system, leaders and people related issues.

In terms of strategy it was found that public sector organisations lack in global perspective thinking, innovation and risk taking. Consequently, these aspects of culture must be paid attention to and built into the organisation's culture. Further, it was also found that public sector organisations to be highly affected by political influences which may hinder some aspects of learning. Therefore, eliminating these influences will elevate the level of learning. In addition to that recruitment policies to allow younger generation into public sectors will also be an added value to culture in terms of learning.

Table 3. Cultural attributes for project learning in public sectors

Facilitators	Inhibitors
Collective nature of contractor	Individualistic nature of consultant
Innovation encouraging contractual clauses in construction and consultancy contracts	Senior management of contractor and consultant organisations being risk-averse
Challenging external environment for the contractor	Lack of project investments on project learning as a team
Full-time appointment of project staff	Political influence of client
Learning encouraging project leadership	Lack of a leader to guide project learning
	Consultant's project organisation structure being more of a functional matrix with majority of staff working for parallel projects
	Lack of knowledge storage systems at project level
	Laid-back nature of consultant

When considering systems, there seems to be problems in the developed systems to capture learning. For example, very few organisations record lessons-learned practices. This is a major drawback in promoting learning in public sector organisations. As organisational learning process has a distinct step called organisation memory, it is important to record learnt practices in such ways that enable future access. Hence, organisations must concentrate on systems to capture learning. For lack of systems to capture learning, it is recommended to maintain lessons-learned practices, database of past records, maintain skills of employees, measure gaps and cater proper training to employees to cover deficiencies in skills. Further, formalised and structured characteristics must be reduced and flexibility in thinking must be promoted. Rewarding systems for team achievements and effective information sharing systems would also lead to effective learning.

Leaders of public sector organisations are sometimes perceived to be acting in favour of the government. This may be an inhibitor for learning in organisations. Therefore, it is recommended that leaders must be given authority to empower their subordinates, work independently and take independent decisions. Leaders are also expected to be a mentor, competitor, innovator as well as risk taker to promote learning. As well, leaders must encourage team discussions and revise team goals according to circumstances. Further, leaders must take special care in organising meetings to share up-to-date information with their subordinates which addresses information distribution need of organisational learning.

People are the heart of any organisation. Attitude of people plays a major role in determining any issues. Similarly, organisational learning is also affected by the attitude of people. First and foremost, people must be made aware of organisational learning and its benefits to them as without people's positive attitudes organisational learning process cannot happen. Similarly, people must willingly share information with each other for organisational learning process to be effective. In most of the public sector organisations, there are restrictions in interfering with management's decision. This may restrict emergence of new views which leads to learning. Therefore, allowing employees to comment on management's decision and revising based on good comments may lead toward organisational learning. Providing employees control over the resources and recognising people who take initiatives are also signs of promoting learning.

Similarly, present culture of any public sector organisation can be analysed through Marsick and Watkins, (2003) Dimensions of Learning Organisation Questionnaire instrument as well as attributes that facilitate learning can also be identified in the given context. Then, dimensions of culture that need development will be identified and required change can be accommodated as well as culture can be developed with facilitating attributes. Therefore, any public sector organisation can adopt this approach in changing their present culture with the intention of promoting sustained organisational learning in their organisation.

In addition, there can be a poor learning culture at project level, despite the sound learning cultures existing at the organisational level, if deliberate effort and systems are not in place to manage project learning as a joint team of client, contractor and consultant. According to the case study findings, contractor and consultant are trying to carry out their learning activities in isolation within a fragmented platform, without integrating the project learning as a joint effort. Public sector clients should be encouraged more on making deliberate investments and initiatives for project learning to enhance project learning culture to achieve better project outcomes. Systems should be set in to manage feed-forward learning (learning flowing from individual, group, to organisation) by implementing systems to capture and store project learnings at organisational level.

FUTURE RESEARCH DIRECTIONS

This study figured out that changing culture of public sector organisation is not an easy task. Hence, a detailed study may be carried out to explore how and the ways in which change efforts can be facilitated to accommodate changes to culture of government organisation. Also, further case studies could be expanded into different types of public sector organisations in different contexts. In addition to that a detailed investigation on government's role and how government can promote learning in public sector organisation could also be explored. Moreover, a study to develop a framework to manage learnings from project level to organisational level at public sector would be of greater value.

CONCLUSION

The aim of this chapter was to propose an approach to public sector organisations to identify and change present culture to a culture that promotes effective learning in organisation and to extend such culture to project level. This was aided through a case study conducted with a large public sector construction contracting organisation operating in Sri Lanka. Findings revealed that organisational learning process is not deliberately advanced in public organisations due to the present culture. Therefore, several issues on characteristics of present culture were figured out. It was identified that problems exist in terms of empowering people, systems to capture learning and attitudes of employees and leaders. Further, cultural attributes that facilitate learning in selected organisation were identified where flexible, externally oriented as well as people concern attributes of culture are found to be promoting organisational learning. These findings led to propose changes in strategy, system, leaders and people related issues of culture. Case study findings revealed the fragmented nature of learning culture at project level in public sector. Proper systems are essential to achieve an effective learning culture at project level by integrating the main three project participants including client, contractor and consultant. Accordingly, organisations

can significantly enhance organisational learning by paying attention to their culture. Managers may use different strategies to shape different people to fit into culture and get best out of them. By this proposed approach it is hoped that the present culture of public sector organisations could be changed effectively into an organisational learning culture.

REFERENCES

- Al-Alawi, A. I., Al-Marzooqi, N. Y., & Mohammed, Y. F. (2007). Organisational culture and knowledge sharing: Critical success factors. *Journal of Knowledge Management*, 11(2), 22–42. doi:10.1108/13673270710738898
- Almahamid, S. (2010). The relationships among organisational knowledge sharing practices, employees' learning commitments, employees' adaptability, and employees' job satisfaction: An empirical investigation of the listed manufacturing companies in Jordan. *Interdisciplinary Journal of Information, Knowledge, and Management*, 5, 327–356. doi:10.28945/1225
- Argyris, C. (1995). Action science and organisational learning. *Journal of Managerial Psychology*, 10(6), 20–26. doi:10.1108/02683949510093849
- Argyris, C. (1999). On organisational learning (2nd ed.). Oxford, UK: Blackwell Publishing.
- Argyris, C., & Schon, D. (1978). *Organisational learning: a theory of action perspective*. Reading, MA: Addison Wesley.
- Bossink, B. (2018). The influence of knowledge flow on sustainable innovation in a project-based industry: From demonstration to limited adoption of eco-innovations. *Journal of Cleaner Production*, 193, 249–262. doi:10.1016/j.jclepro.2018.05.063
- Chang, S. C., & Lee, M. S. (2007). A study on relationship among leadership, organisational culture, the operation of learning organisation and employees' job satisfaction. *The Learning Organization*, 14(2), 155–185. doi:10.1108/09696470710727014
- Cheung, S. O., Wong, P. S. P., & Wu, A. W. Y. (2011). Towards an organisational culture framework in construction. *International Journal of Project Management*, 29(1), 33–44. doi:10.1016/j.ijpro-man.2010.01.014
- De Long, D. W., & Fahey, L. (2000). Diagnosing cultural barriers to knowledge management. *The Academy of Management Executive*, 14(4), 113–127.
- Ellinger, A. D., Watkins, K. E., & Bostrom, R. P. (2000). Managers as facilitators of learning in learning organisations: A rejoinder to dirkx's invited reaction. *Human Resource Development Quarterly*, 11(4), 403–409. doi:10.1002/1532-1096(200024)11:4<403::AID-HRDQ6>3.0.CO;2-L
- Gemünden, H. G., Lehner, P., & Kock, A. (2018). The project-oriented organisation and its contribution to innovation. *International Journal of Project Management*, 36(1), 147–160. doi:10.1016/j.ijpro-man.2017.07.009
- Greenberg, J., & Baron, R. A. (2008). Behavior in organisations (9th ed.). Upper Saddle River, NJ: Pearson

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Geert Hofstede Cultures and Organisations – Software of the Mind* (3rd ed.). New York, NY: McGraw-Hill.

Hong, J. (1999). Structuring for organisational learning. *The Learning Organization*, 6(4), 173–185. doi:10.1108/09696479910280631

Huber, G. P. (1991). Organisational learning: The contributing processes and literatures. *Organization Science*, 2(1), 88–115. doi:10.1287/orsc.2.1.88

iZuo, J., & Zillante, G. (2005). Project culture within construction projects: a literature review. In R. Kenley (Ed.), *Proceedings of 13th International Group for Lean Construction Conference (IGLC-13)*. Sydney, Australia: The International Group for Lean Construction. Retrieved from <http://search.informit.com.au/documentSummary;dn=589335968948639;res=IELENG>

Kim, D. H. (1993). The link between individual and organisational learning. *Sloan Management Review*, (Fall): 37–50.

Kondalkar, V.G. (2009). *Organisation effectiveness and change management*. New Delhi, India: PHI Learning

Kumaraswamy, M., Rowlinson, S., Rahman, M., & Phua, F. (2002). Strategies for triggering the required ‘cultural revolution’ in the construction industry. In R. F. Fellows, & D. E. Seymour (Eds.), *Proceedings of CIB TG-23 – Culture in Construction*. Rotterdam, The Netherlands: CIB Publication.

Lopez, S. P., Peon, J. M. M., & Ordas, C. J. V. (2004). Managing knowledge: The link between culture and organisational learning. *Journal of Knowledge Management*, 8(6), 93–104. doi:10.1108/13673270410567657

M. F., & Lee, G. G. (2007). Relationships of organisational culture toward knowledge activities. *Business Process Management Journal*, 13(2), 306–322.

Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organisation’s learning culture: The dimensions of the learning organisation questionnaire. *Advances in Developing Human Resources*, 5(2), 132–151. doi:10.1177/1523422303005002002

Nevis, E. C., Dibella, A. J., & Gould, J. M. (1995). Understanding organisations as learning systems. *Sloan Management Review*, 36(2), 73–85.

Park, H., Ribree, V., & Schutle, W. D. (2004). Critical attributes of organisational culture that promote knowledge management technology implementation success. *Journal of Knowledge Management*, 8(3), 106–117. doi:10.1108/13673270410541079

Pham, N. T., & Swierczek, F. W. (2006). Facilitators of organisational learning in design. *The Learning Organization*, 13(2), 186–201. doi:10.1108/09696470610645502

Schein, E. H. (1990). Organisational culture. *The American Psychologist*, 45(2), 109–119. doi:10.1037/0003-066X.45.2.109

Schein, E. H. (1993). On dialogue, culture and organisational learning. *Reflections: The SoL Journal*, 4(4), 27–38. doi:10.1162/152417303322004184

Schein, E. H. (1996). Can learning cultures evolve? *The Systems Thinker*, 7(6), 1–5.

- Schein, E. H. (2010). *Organisational culture and leadership* (4th ed.). San Francisco, CA: Jossey-Bass.
- Skerlavaj, M., Indihar Stemberger, M., Skrinjar, R., & Dimovski, V. (2007). Organisational learning culture--the missing link between business process change and organisational performance. *International Journal of Production Economics*, 106(2), 346–367. doi:10.1016/j.ijpe.2006.07.009
- Styhre, A., Josephson, P., & Knauseder, I. (2004). Learning capabilities in organisational networks: Case studies of six construction projects. *Construction Management and Economics*, 22(9), 957–966. doi:10.1080/0144619042000241417
- Teare, R., & Pantin, D. F. (2002). Cascading organisational learning. *International Journal of Contemporary Hospitality Management*, 14(7), 349–353. doi:10.1108/09596110210440648
- Valle, R. S., Valencia, J. C. N., Jimenez, D. J., & Caballero, L. P. (2011). Linking organisational learning with technical innovation and organisational culture. *Journal of Knowledge Management*, 15(6). Retrieved from <http://www.emeraldinsight.com/journals.htm?articleid=1944543&show=abstract&>
- Watkins, K. E., & Marsick, V. J. (1996). In action: creating the learning organisation. Alexandria, VA: American Society for Training and Development.
- Wiewiora, A., Smidt, M., & Chang, A. (2018). The ‘how’ of multilevel learning dynamics: A systematic literature review exploring how mechanisms bridge learning between individuals, teams/projects and the organisation. *European Management Review*.

ADDITIONAL READING

- Argyris, C. (1976). Single-loop and double-loop models in research on decision making. *Administrative Science Quarterly*, 21(3), 363–375. doi:10.2307/2391848
- Argyris, C. (1995). Action science and organisational learning. *Journal of Managerial Psychology*, 10(6), 20–26. doi:10.1108/02683949510093849
- Chiva, R., Grandío, A., & Alegre, J. (2010). Adaptive and generative learning: Implications from complexity theories. *International Journal of Management Reviews*, 12(2), 114–129. doi:10.1111/j.1468-2370.2008.00255.x
- Dodgson, M. (1993). Organisational learning: A review of some literatures. *Organization Studies*, 14(3), 375–394. doi:10.1177/017084069301400303
- Fiol, C. M., & Lyles, M. A. (1985). Organisational learning. *Academy of Management Review*, 10(4), 803–813. doi:10.5465/amr.1985.4279103
- Kotnour, T. (2000). Organisational learning practices in the project management environment. *International Journal of Quality & Reliability Management*, 17(4/5), 393–406. doi:10.1108/02656710010298418